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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,340	02/16/2001	Jamil Ahmad	476-1989	1603

7590 06/30/2004  
William M. Lee, Jr.  
Barnes & Thornburg  
P.O. Box 2786  
Chicago, IL 60690-2786

EXAMINER

AHN, SAM K

ART UNIT	PAPER NUMBER
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2634

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DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/785,340

Applicant(s)

AHMAD, JAMIL

Examiner

Sam K. Ahn

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

On page 5, lines 29-30, it appears that the description of figure 5 is described as a description of figure 4.

Appropriate correction is required.

### ***Claim Objections***

2. Claims 1-20 are objected to because of the following informalities:

In claims 1, 6, 12 and 15, lines 5, 5, 6 and 8, respectively, delete "single tone signalling frequencies" and insert "said single frequency signalling tones".

In claims 1, 6, 12 and 15, lines 5-6, 6, 6-7, 8-9, respectively, delete "dual tone signalling frequencies" and insert "said dual frequency signalling tones".

In claims 1 and 6, lines 6 and 6, respectively, delete "when a frequency match" and insert "when a match of said mean frequency".

In claims 1 and 6 lines 7 and 7, respectively, delete "that match" and insert "said match".

In claims 1 and 6 lines 7-8 and 8, respectively, delete "a single or dual frequency signal" and insert "said single or dual frequency signalling tones".

In claims 2 and 7, lines 1 and 1, respectively, delete "said single tones" and insert "said single frequency signalling tones".

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In claims 3 and 8, lines 2 and 2, respectively, delete "in a tone" and insert "in said single or dual frequency signalling tone".

In claims 5 and 10, lines 1-2 and 1-2, respectively, delete "single and dual tone signals" and insert "said single and dual frequency signalling tones".

In claim 6, line 9, delete "that single or dual frequency signal" and insert "said single or dual frequency signalling tone".

In claims 12 and 15, lines 3 and 3, respectively, delete "the tone detector" and insert "the signalling tone detector".

In claim 13, line 1, delete "and incorporating" and insert "and further incorporating".

In claims 13 and 14, lines 1 and 1, respectively, delete "A tone detector" and insert "A signalling tone detector".

In claim 15, lines 4-5, delete "to one or other of the output paths" and insert "to first or second output path".

In claim 15, line 6, delete "an input signal" and insert "said input signal".

In claim 15, line 16, delete "--- tone." and insert "--- tones."

In claim 16, lines 1-2, delete "the input" and insert "an input".

In claim 17, line 4, delete "the echo canceller" and insert "the echo canceller circuit".

In claims 17 and 20, lines 4 and 6, respectively, delete "a signal tone detector" and insert "a signalling tone detector".

In claims 17 and 20, lines 5 and 7, respectively, delete "the tone detector" and insert "the signalling tone detector".

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In claims 17 and 20, lines 8 and 10, respectively, delete "single tone signalling frequencies" and insert "single frequency signalling tones".

In claims 17 and 20, lines 9 and 11, respectively, delete "dual tone signalling frequencies" and insert "dual frequency signalling tones".

In claim 18, line 1, delete "an echo" and insert "said echo".

In claim 19, line 1, delete "An arrangement" and insert "An echo canceller arrangement".

In claim 20, line 4, delete "said TDM and connectionless networks" and insert "said TDM network and connectionless network".

In claim 20, line 6, delete "echo canceller" and insert "echo canceller circuit".

Claims 4, 9 and 11 directly or indirectly depend on claims 1 or 6.

Appropriate correction is required.

### ***Conclusion***

3. This application is in condition for allowance except for the following formal matters:

Specification and claim objections.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Ahn** whose telephone number is **(703) 305-0754**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Stephen Chin**, can be reached at **(703) 305-4714**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

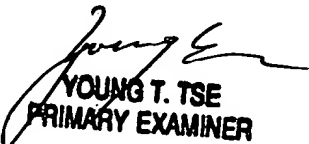
**or faxed to:**

**(703) 872-9306**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Sam K. Ahn  
6/25/04

  
**YOUNG T. TSE**  
**PRIMARY EXAMINER**